



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 393,563	09 10 1999	JAMES R. WOODWARD	LD-10956-GE0	2909

7550

05 23 2003

TIMOTHY E. NAUMAN
FAY SHARPE FAGAN MINNICH & MCKEE
1100 SUPERIOR AVENUE
7TH FLOOR
CLEVELAND, OH 441142518

EXAMINER

GUHARAY, KARABI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/393,563

Examiner

Karabi Guharay

Applicant(s)

WOODWARD ET AL.

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 6-18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 6054810), and further in view of Sugimoto et al. (US 6208070).

Regarding claims 1 & 9, Yamamoto et al. disclose a ceramic metal halide lamp (see abstract and Fig 1 or Fig 2) comprising an envelope (1) an elongated interior chamber (4) disposed within the envelope (1) having a lamp body located therein (see lines 32-39 of column 4) at least one electrode lead (6a, 6b) partially housed by the interior chamber (4), and a single continuous elongated mandrel (6a) forming a shaft of the electrode lead (lines 13-15 of column 5). But Yamamoto et al. fail to disclose an

Art Unit: 2879

overwind component associated with the mandrel at a predetermined position. However, Sugimoto et al. discloses an overwind component associated with the mandrel of the electrode lead and teaches that the overwind coil (shown in Fig 3) wrapped around the mandrel provides a high temperature resistance as well as low reactivity with the metal halide compound (see lines 9-12 of column 5). Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to include overwind component associated with the mandrel of the electrode lead, as disclosed by Sugimoto et al., in the device of Yamamoto et al. (a discharge lamp containing metal halide component) since this overwind component will provide a high temperature resistance for the electrode lead as well as low reactivity with the metal halide compound present in the envelope.

Regarding claim 2, Yamamoto discloses that the interior chamber (4) has first and second legs (4d, 4e) extending therefrom for receiving first and second lead (6a, 6b) respectively.

Regarding claims 3-4, & 10, Yamamoto includes electrode 8a (operatively associated with one end of the mandrel 6a, but silent about the electrode being coil formed from tungsten. Since, it is conventional in the art to provide tip coil made of tungsten, as disclosed in Sugimoto, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use coil tip made of tungsten as electrode 8a in the device of Yamamoto.

Regarding claims 6 & 11, Sugimoto et al. disclose that the overwind component is formed of molybdenum.

Regarding claims 7, & 12, Yamamoto discloses that mandrel is formed of a single piece of niobium (line 65-66 of column 4) instead of claimed tungsten. However, niobium, tungsten, molybdenum are suitable materials for the lead in conductors in the discharge tube. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to tungsten instead of niobium, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

Regarding claims 8 and 13, Sugimoto et al. meet all the claimed limitations of claim 8, and 13, except for the limitation of outside diameter of the overwind component being greater than the outside diameter of the electrode tip coil. Sugimoto is silent about the dimension of the electrode coil tip. However, It is noted that applicant's limitation of having outside diameter of the overwind portion greater than the outside diameter of the electrode tip coil, does not solve any of the stated problems or yield any unexpected result that is not within the scope of the teachings applied. Therefore it is considered to be a matter of choice, which a person of ordinary skill in the art would have found obvious to choose the outside diameter of the electrode tip coil to be less than the outside diameter of the overwind component (as evidenced in the device of Stoffels et al. US 5751111).

The method claims of 14-18 are rejected as claims 9-12, since the method of claims 14-18 inherently follow the structure of claims 9-12.

Claims 1-2, & 9, are rejected under 35 U.S.C. 102(e) as being unpatentable over Ikeuchi et al. (US 5932969) and further in view of Fridrich et al. (US 4275329).

Regarding claims 1 & 9, Ikeuchi et al. disclose a ceramic metal halide lamp (lines 22-27, lines 53-54 of column 5) comprising an envelope (2 of Fig 3) an elongated interior chamber (1) disposed within the envelope having a lamp body (11 of Fig 1) located therein, at least one electrode lead (31, 21 of Fig 1) partially housed by the interior chamber and a single continuous elongated mandrel (21, 31) forming a shaft of the electrode lead. But Ikeuchi is silent about an overwind component operatively associated at a predetermined position. However, Fridrich et al. disclose an overwind (13) associated with the shank portion (11) of the electrode lead in (6, Fig 3). This overwind reduces breakdown voltage and provide rapid transition from glow to arc (see abstract). This it would have been obvious to one having ordinary skill in the art at the time the invention was made to include overwind, as disclosed by Fridrich, in the device of Ikeuchi, in order to reduce breakdown voltage and provide rapid glow to arc transition.

Regarding claim 2, Ikeuchi discloses that the interior chamber has first and second legs (sealing tubes 12) extending for receiving first and second leads (21, 31).

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure : Dixon (US 4550269).

Art Unit: 2879


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (703) 305-1971. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

K.G.
Karabi Guharay
Patent Examiner
Art Unit 2879


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2801